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*Original article*

# Assessment of Export Potential of Kolanut in Nigeria: A Case of Ogun State

Aderonke Taiwo Yahaya[1*], Chinweike Abednego Ugwu[1], Muhammed Muhammed[2], Atiku Abdullahi[2], Joseph Oryinem Ejugwu[1] and Ungbo Abachi[2]

[1]Economics Section, Cocoa Research Institute of Nigeria, Idi-Ayunre, P.M.B. 5244, Ibadan, Nigeria.
[2]Extension Section, Cocoa Research Institute of Nigeria, Idi-Ayunre, P.M.B. 5244, Ibadan, Nigeria.

*Corresponding author: ronke.yahaya@yahoo.com

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**Abstract**
Kolanut is an economically significant crop in Nigeria, with strong cultural, medicinal, and commercial value. Despite its demand in both local and international markets, the full potential of kolanut export remains largely untapped due to various production and marketing constraints. The study examined the export potential of kolanut in Ogun State, Nigeria. Two Local Government Areas (Obafemi Owode and Shagamu Local Government Areas) were purposively sampled. These areas are known for the production and marketing of Kolanut. A total sample of ninety-eight respondents was randomly selected from the two Local Government Areas. Structured interview schedules were used for data collection from respondents. The data collected were analyzed using descriptive statistics. Findings revealed that the kolanut trade is dominated by older individuals with limited formal education, which affects access to relevant market information and export opportunities. Although there is a significant willingness to engage in exportation, several challenges hinder market expansion. These include inadequate supply due to deforestation, kolanut scarcity, and high cost of kolanut, lack of standardized quality control measures, and regulatory bottlenecks. Limited access to finance further constrains traders' ability to scale their businesses and explore international markets. In spite of the challenges encountered, the study revealed promising avenues for strengthening kolanut exports in the study area, particularly through the adoption of improved production practices, stronger market connections, and supportive policy measures.

**Keywords:** Kolanut, marketing, exportation, potential, policies.

## Introduction

Kolanut belongs to the family *Sterculaceae.* It is produced mostly in Africa and is grown in large quantities with outstanding growth performance in Nigeria. Ivory Coast, Ghana, Brazil, and the West Indian Islands (Asogwa *et al.*, 2011). According to the Food and Agriculture Organization (2021), about 50.2% of the kolanuts produced worldwide come from Nigeria. Kolanut has been a known commodity of commerce in Nigeria and other West African communities (Taiwo *et al.*, 2017). It has long been cultivated in the Southern and Eastern parts of Nigeria, consumed and marketed by the Northerners, and worshiped in the East. Kolanut is used as a masticatory and stimulant in the tropics, and it has a significant usage in traditional ceremonies in Nigeria (Adelusi *et al.*, 2021). It is used in industrial areas for pharmaceuticals, the production of soft drinks, wines, and in confectioneries (Ashaye *et al.*, 2021).

Kolanut pod is widely used as by-products for animal feeding because of its high nutrients (Fabunmi *et al.*, 2019). Despite Nigeria being the world's largest producer of kolanuts, the country only earned about $7343 from the export of the commodity in 2022. Similarly, only about 1,957.74 tonnes (1.1%) of the 174,107.87 tonnes of kolanuts produced in 2022 were exported to other nations (FAOSTAT, 2022). Empirical evidence showed South Western region as a dominant area for kola production in Nigeria; however, its export potential is unknown. There is, therefore, a needed to explore the potential of kolanut exportation in Ogun State.

## Methodology

The study was conducted in Ogun State, Nigeria. The state is in the Southwest region and falls into the rainforest ecological zone of the country. A three-stage sampling technique was used. The first stage involved the purposive selection of Ogun State, being one of the prominent states for kola production, marketing and processing in Nigeria, with the selection of two Local Government Areas (Obafemi Owode and Shagamu), which are known for the production and marketing of kolanut. The third stage involved the random selection of 49 respondents from each local government area, making a total of 98 respondents.

Structured questionnaires were used for data collection from respondents. The data obtained were analyzed using descriptive statistics, including mean, frequency, percentage, and standard deviation.

The objectives of the study were to assess the production and marketing activities of kolanut in the study areas, evaluate the potential for kolanut exportation in the area, evaluate the challenges to production, marketing, and exportation of kolanut in Ogun State, and determine the interventions needed for enhancing export of kolanut in Ogun State.

## Results and Discussion

The descriptive statistics presented in Table 1 provide insights into the socio- economic characteristics of kolanut traders in the study area. The average age of traders is approximately 63.5 years, indicating that kolanut trading is dominated by older individuals. This suggests a potential generational gap, as younger people may not be actively engaging in the trade, which could affect the long-term sustainability of the sector (Girdziute *et al.* 2022).

Household sizes average 7 members, implying that many traders have large families, which could influence their financial responsibilities and decision-making in kolanut trading. The traders' annual income averages ₦10,000,000 with significant variations, suggesting disparities in financial success likely influenced by factors such as experience, market access, and trade volume.

The average annual trade volume of kolanut per trader was 86.39 kg, highlighting moderate trading activity, which could indicate supply limitations or market constraints affecting trade expansion. This is line with the findings of Oluwalana *et al.* (2016) who reported that kolanut supply is declining. The respondents in the study area have an average of 29 years of experience, reflecting deep knowledge of the trade but also reinforcing concerns about aging participants (Zeray, 2025).

The demographic characteristics of kolanut traders in the study area, as shown in Table 2, reveal significant insights into their educational background, gender distribution, marital status, primary occupation, and cooperative membership. A substantial proportion of traders (46.9%) have no formal education, while 37.8% attained primary education, and only 15.3% completed secondary education. This suggests that limited educational attainment may affect traders' ability to access market information, adopt modern business practices, and engage in export-oriented trade (Farayola *et al.*, 2013). Enhancing literacy and financial training programs could improve their business skills and market participation. The gender distribution of traders was fairly balanced, with 51.0% female and 49.0% male, indicating that kolanut trading provides economic opportunities for both men and women. This finding deviates from the report of Moss (2017), who reported that while men dominate production, their female counterparts dominate marketing.

Marital status data show that 85.7% of traders are married. This suggests that kolanut trading plays a crucial role in supporting household livelihoods. Kolanut trading is the dominant occupation, with 87.8% of respondents engaged primarily in it, while a smaller proportion (8.2%) are farmers, and 4.1% are involved in other activities. This indicates a strong reliance on kolanut trade for income generation, reinforcing the need for policies that enhance market access and price stability.

All respondents (100%) were members of a cooperative or trade association, highlighting the importance of collective organization in the industry. Cooperative membership can provide access to financial support, shared resources, and market information, which are essential for improving trade efficiency and expanding export potential (Nguyen and Jolly, 2020). Strengthening these cooperatives through government and private sector support could enhance the kolanut trade’s sustainability and competitiveness.

The findings on market access for kolanut traders in Ogun State, Nigeria, highlight key factors influencing their trade operations as indicated in Table 3. A significant majority (81.6%) reported not receiving extension visits, suggesting limited access to agricultural advisory services that could enhance productivity, market knowledge, and business strategies.Extension services play a crucial role in improving farmers' and traders' awareness of modern techniques, quality standards, and export opportunities (Bonephace & Makawia, 2022). Expanding extension outreach could help traders optimize their market pote-

**Table 1: Summary and Descriptive Statistics of Kolanut Traders in Ogun State, Nigeria**

| Descriptive Statistics | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Age | 98 | 50.00 | 80.00 | 63.5204 | 7.92650 |
| Household size | 98 | 3.00 | 12.00 | 7 | 1.78820 |
| Annual income (**N**) | 98 | 2000000.00 | 20000000.00 | 10000000.00 | 4213380.747 |
| Annual trade volume (Kg) | 98 | 25.00 | 166.66 | 86.3902 | 35.70588 |
| Kolanut trade experience | 98 | 15.00 | 50.00 | 29.0510 | 8.45896 |
| Average kolanut price per kg | 98 | 3000 | 5000 | 4200 | 1800.738 |

***Source***: Field survey, 2024.

**Table 2: Selected Socio-Economic Characteristics of Kolanut Traders in Ogun State, Nigeria.**

| Educational qualification | Frequency | Percent |
|---|---|---|
| No formal | 46 | 46.9 |
| Primary education | 37 | 37.8 |
| Secondary education | 15 | 15.3 |
| **Total** | **98** | **100.0** |
| **Sex** | | |
| Male | 48 | 49.0 |
| Female | 50 | 51.0 |
| **Total** | **98** | **100.0** |
| **Marital status** | | |
| Married | 84 | 85.7 |
| Separated | 4 | 4.1 |
| Divorced | 10 | 10.2 |
| **Total** | **98** | **100.0** |
| **Primary occupation** | | |
| Kolanut trader | 86 | 87.8 |
| Farmer | 8 | 8.2 |
| Others | 4 | 4.1 |
| **Total** | **98** | **100.0** |
| **Membership of a cooperative / association** | | |
| Yes | 98 | 100.00 |
| **Total** | **98** | **100.00** |

***Source***: Field survey, 2024.

ntial and adopt best practices.

All respondents (100%) were traders within the kola value chain, emphasizing the central role of trading in the kolanut industry. Regarding the varieties traded, an equal proportion of traders (25%) deal exclusively in *Cola nitida* or *Cola acuminata*, while half (50%) trade both varieties. This indicates a balanced demand for both species, which can be shaped by consumer preferences, cultural relevance, and distinct market demands.

Wholesalers were the primary buyers of kolanut, accounting for 61.2% of sales, followed by retailers (33.7%) and direct consumers (5.1%). This distribution suggests that the kolanut trade is largely structured around bulk transactions, with minimal direct consumer engagement. Strengthening value chain linkages, such as increasing direct sales to consumers and exploring export markets, could enhance profitability and trade efficiency. The average selling price of kolanut is ₦4,200 per kilogram, reflecting current market conditions. Additionally, most traders (81.6%) rely on public transport to reach markets, while only 18.4% use personal vehicles. Dependence on public transport may lead to increased costs, delays, and logistical challenges (Lako & Gjevori, 2023).

**Table 3: Access to market by the respondents in the study, Ogun State, Nigeria.**

| Extension visits | Frequency | Percentage |
|---|---|---|
| **Yes** | 18 | 18.4 |
| **No** | 80 | 81.6 |
| Total | 98 | **100.0** |
| Position in Kola value chain | | |
| **Trader** | 98 | 100.00 |
| Total | **98** | **100.00** |
| Varieties of kolanut traded | | |
| **Cola nitida** | 24 | 25 |
| **Cola acuminata** | 24 | 25 |
| **Both** | 48 | 50 |
| Total | **98** | **100** |
| Buyers of your kolanut | | |
| **Wholesalers** | 60 | 61.2 |
| **Retailers** | 33 | 33.7 |
| **Consumers** | 5 | 5.1 |
| Total | **98** | **100** |
| Average selling price per kg (₦) | 4,200 | |
| Means of transport to the market | | |
| **Public transport** | 80 | 81.6 |
| **Personal vehicle** | 18 | 18.4 |

***Source***: Field survey, 2024.

Presented in Table 4 is the potential of kolanut marketing and export in the study area. The findings revealed a strong willingness among kolanut traders in the study area to engage in export activities, with 64.3% being strongly willing and 29.6% willing, while only

6.1% remain undecided. This enthusiasm aligns with the increasing demand for kolanut (Ashaye, 2021), as reported by 93.9% of respondents. However, despite this favorable market trend, traders face significant constraints in expanding their trade volume.

A substantial 90.8% indicated their inability to increase traded volume, and 91.8% stated that they struggle to meet daily demand. Likewise, 91.8% of traders do not foresee an increase in their traded volume in the near future. These results suggest that while export potential exists, structural barriers such as inadequate supply capacity, financial constraints, or logistical challenges may hinder effective participation in export markets (Molefe, 2020).

**Table 4: Willingness of Kolanut Traders in the Study Area to Export Kolanut**

| How willing are you to export kolanut | Frequency | Percent |
|---|---|---|
| Undecided | 6 | 6.1 |
| Willing | 29 | 29.6 |
| Strongly willing | 63 | 64.3 |
| **Total** | **98** | **100.0** |
| **Trend in kolanut demand in the study area** | **Frequency** | **Percent** |
| Increasing | 92 | 93.9 |
| Decreasing | 6 | 6.1 |
| **Total** | **98** | **100.0** |
| **Potential of traders to increase traded volume** | **Frequency** | **Percent** |
| Yes | 9 | 9.2 |
| No | 89 | 90.8 |
| **Total** | **98** | **100.0** |
| **Ability of traders to match demand on daily basis** | **Frequency** | **Percent** |
| Yes | 8 | 8.2 |
| No | 90 | 91.8 |
| **Total** | **98** | **100.0** |
| **The possibility of the kolanut traded volume to increase** | **Frequency** | **Percent** |
| Yes | 8 | 8.2 |
| No | 90 | 91.8 |
| **Total** | **98** | **100.0** |

**Source: Field survey, 2024.**

Shown in Table 5 are several challenges affecting kolanut production, marketing, and exportation in the study area. The most significant constraint in production is deforestation, cited by 72.5% of respondents, highlighting the environmental threat to kolanut cultivation. Other challenges include pest and disease infestations (12.2%), the long gestation period of kolanut trees (13.3%), and low youth participation in farming (2.0%), which may pose long-term sustainability risks (Asogwa *et al.*, 2012). In terms of marketing, the primary challenge is the scarcity of kolanut, affecting 73.5% of traders, while 24.5% attribute difficulties to high costs, and only 2.0% report poor demand. This is in line with Christopher *et al* (2021), who reported that kolanut scarcity is the major challenge facing kolanut marketing in Kaduna state, Nigeria. Similarly, scarcity remains the leading issue in exportation (67.3%), followed by high costs (20.4%), regulatory constraints (5.1%), and the smuggling of banned items alongside kolanut (7.1%). These challenges suggest that despite strong demand, production constraints and supply chain inefficiencies hinder the growth of kolanut trade.

**Table 5: Challenges Facing Kolanut Production, Marketing, and Exportation in The Study Area**

| **Challenges facing kolanut production in the study area** | | |
|---|---|---|
| **Challenges** | **Frequency** | **Percent** |
| Pest and diseases | 12 | 12.2 |
| Deforestation | 71 | 72.5 |
| Long gestation period of kola | 13 | 13.3 |
| Lack of the youth's interest in agriculture (kola farming) | 2 | 2.0 |
| **Total** | **98** | **100.0** |
| **Challenges facing kolanut marketing in the study area** | | |
| Scarcity of kolant | 72 | 73.5 |
| Poor demand for kolanut | 2 | 2.0 |
| High cost of kolanut | 24 | 24.5 |
| **Total** | **98** | **100.0** |
| **Challenges facing kolanut exportation in the study area** | | |
| Scarcity of kolanut | 66 | 67.3 |
| High cost of kolanut | 20 | 20.4 |
| Regulatory issues | 5 | 5.1 |
| Smuggling of banned items with kolanut | 7 | 7.1 |
| **Total** | **98** | **100.0** |

***Source***: Field survey, 2024

Presented in Table 6 are key interventions necessary for enhancing kolanut export in the study area. The most critical intervention identified is the regulation of deforestation, as indicated by 55.1% of respondents. This suggests that environmental degradation poses a major threat to kolanut production, potentially affecting supply sustainability. Additionally, 20.4% of traders emphasize the need for improved kolanut varieties, which could enhance productivity and quality, making the product more competitive in export markets.

Expanding kolanut farms (14.3%) and encouraging youth participation in kolanut farming (10.2%) were also seen as crucial strategies for increasing production capacity and ensuring the sector's long-term viability. These findings suggest that addressing environmental concerns, improving seed quality, and promoting expansion initiatives are essential to boosting kolanut exports.

**Table 6: Interventions Needed for Enhancing Export in The Study Area**

| Interventions | Frequency | Percent |
|---|---|---|
| Regulation on deforestation | 54 | 55.1 |
| Availability of improved varieties | 20 | 20.4 |
| Enhance youth interest in kola farming | 10 | 10.2 |
| Expansion of kola farms | 14 | 14.3 |
| **Total** | **98** | **100.0** |

## Conclusion

The study examined the potential of kolanut exportation in Ogun State, Nigeria. The findings indicate that kolanut trade is dominated by older individuals with limited formal education, which affects access to market information and export participation. While there is significant willingness to engage in exportation, several constraints, including scarcity of kolanut, high production costs, regulatory hurdles, and environmental concerns such as deforestation, limit expansion. Despite strong local and international demand, supply constraints hinder the ability of traders to scale their operations. The study therefore recommends that environmental sustainability should be prioritized by enforcing regulations to curb deforestation, and promoting agroforestry and improved kolanut varieties with short gestation period. Similarly, youth involvement in kolanut farming should be encouraged through incentives such as access to land and financial support for the sustainability of Nigeria's kolanut sector. Additionally, market expansion efforts should focus on improving infrastructure, strengthening cooperative societies, and enhancing extension services to support traders in adopting modern business strategies. Government policies should also be refined to eliminate regulatory bottlenecks, facilitate trade, and establish export incentives to enhance Nigeria's competitiveness in the global kolanut market.

## Conflict of Interest

The authors wish to state that there was no conflict of interest during the course of this research work.

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